

This Listing Statement is compiled by the Exchange from documents filed by the Company in making application for listing. It is issued for the information of members, member firms and member corporations of the Exchange. It is not and is not to be construed as a prospectus. The Exchange has received no consideration in connection with the issue of this Listing Statement other than the customary listing fee. The documents referred to above are open for inspection at the general office of the Exchange.

LISTING STATEMENT No. 2330

LISTED December 19, 1968
5,000,000 common shares without par value
Stock symbol "MN"
Post section 4.6
Dial quotation number 1397

THE TORONTO STOCK EXCHANGE

LISTING STATEMENT

LES MINES MADELEINE LTEE — MADELEINE MINES LTD.

Incorporated under the Mining Companies Act (Quebec)
by Letters Patent dated February 2nd, 1968

1. Address of the Company's Head Office and of any other offices: Head Office - 2100 Place du Canada, Montreal 3, Quebec; Executive Offices - Suite 1200, 55 Yonge St., Toronto 1, Ont.; Mine Office - P.O. Box 460, Ste. Anne des Monts, Quebec.

2. Officers of the Company:

OFFICE HELD	NAME	ADDRESS	OCCUPATION
President	M. A. Cooper	15 Elm Avenue, Toronto 5, Ontario	Corporation Executive
Vice-President and General Manager	J. B. Anderson	11 Thornbury Cres., Islington, Ontario	Mining Company Executive
Secretary	F. T. McKinney	464 Chamberlain Lane, Oakville, Ontario	Corporate Secretary
Treasurer	S. R. Varley	1414 Amber Cres., Oakville, Ontario	Corporation Financial Officer

3. Directors of the Company:

NAME	ADDRESS	OCCUPATION
J. B. Anderson	11 Thornbury Cres., Islington, Ontario	Mining Company Executive
M. A. Cooper	15 Elm Avenue, Toronto 5, Ontario	Corporation Executive
J. K. Godin	6 Kingsway Cres., Toronto 18, Ontario	Mining Company Executive
W. P. Hammond	104 Sutherland Dr., Toronto 17, Ontario	Geologist
F. A. Johnston	179 Hillhurst Blvd., Toronto 12, Ontario	Solicitor
N. B. Keevil, Jr.	45 Balliol Street, Toronto 7, Ontario	Mining Company Executive
J. J. Rankin	500 Avenue Road, Toronto 5, Ontario	Mining Company Executive
R. J. Wright	226 Stibbard Avenue, Toronto 12, Ontario	Solicitor
L. Landry	Cap Chat, Gaspé Nord, Quebec	Lumber Company Executive

4. Names and addresses of all transfer agents:

Canada Permanent Trust Company:
600 Dorchester Boulevard West, Montreal, Quebec
1901 Yonge Street, Toronto 7, Ontario

5. Particulars of any fee charged upon transfer other than customary government taxes:

The fee charged on stock transfers other than customary government taxes, is 50¢ for each new certificate.

6. Names and addresses of all registrars:

Canada Permanent Trust Company:

600 Dorchester Boulevard West, Montreal, Quebec
1901 Yonge Street, Toronto 7, Ontario

7. Amount of authorized capital:

5,000,000 common shares without par value, not to exceed in aggregate \$4,000,000.

8. Number of shares and par value:

9. Full details of all shares issued in payment for properties or for any other assets other than cash:

DATE	NUMBER OF SHARES	Brief description of the properties or other assets and the aggregate consideration therefor, expressed in cash, shares, etc.
May 28, 1968	3,705,868	Issued to Wexford Mines Limited pursuant to an agreement dated February 2nd, 1968, which company received these shares, together with beneficial ownership of the shares mentioned in Item 10, as consideration for the sale by it to the Company of all assets, including mining properties, of Wexford.
Total	3,705,868	

10. Full details of all shares sold for cash.	DATE	NO. OF SHARES	PRICE	AMOUNT REALIZED
	Feb. 9, 1968	18	\$1.00	\$18.00
		18		\$18.00
11. Total number of shares issued:	3,705,886			
12. Number of shares now in treasury or otherwise unissued:	1,294,114			
13. Particulars of any issued shares held in trust for the Company or donated for treasury purposes:	None.			
14. Date of last annual meeting.	First Annual Meeting to be held during 1969.			
15. Date of last report to shareholders.	No such report to date.			
16. Details of any treasury shares (or shares issued subject to payment or shares held for the benefit of the treasury) now under option or the subject of any underwriting or sales agreement. If none, this to be stated.	By an agreement formed by the acceptance by the Company on May 28th, 1968, of an offer in writing by McIntyre Porcupine Mines Limited dated April 25th, 1968, McIntyre has agreed to provide financing of \$12,500,000 to enable the Company to bring into production its mine at Ste. Anne des Monts, Quebec. The financing will be effected by McIntyre purchasing from the Company 12,500 units each consisting of one \$1,000 5% Income Bond and 80 common shares at a purchase price of \$1,000 per unit. Under the provisions of this agreement, 1,000,000 common shares will be issued to McIntyre.			
17. Names and addresses of persons having any interest, direct or indirect, in underwritten or optioned shares or other securities or assignments, present or proposed.	None.			
18. Details of any payments in cash or securities of the Company made or to be made to a promoter or finder in connection with a proposed underwriting or property acquisition.	Commencing in the first calendar year following the completion of redemption by the Company of the Income Bonds issued to McIntyre Porcupine Mines Limited, the Company has agreed to pay to the original vendors to Wexford Mines Limited of its mining properties, yearly payments equal to 10% of the cash flow of the Company until \$500,000 has been so paid.			

19. Details of any shares pooled, deposited in escrow, non-transferable or held under any voting trust agreement, syndicate agreement or control.	No shares are pooled, deposited in escrow or nontransferable.
20. Names and addresses of owners of more than a 5% interest in pooled or escrowed shares and their shareholdings. (If shares are registered in the names of nominees or in street names, give names of beneficial owners, if possible.)	No pooled or escrowed shares.
21. Names, addresses and shareholdings of five largest registered shareholders and if shareholdings are pooled or escrowed, so stating. If shares are registered in names of nominees or in street names, give names of beneficial owners, if possible, and if names are not those of beneficial owners, so state.	<p>Area Mines Limited, Suite 1000, 11 Adelaide St. West, Toronto 1, Ontario (1,551,176).</p> <p>Frobex Limited, Suite 904, 85 Richmond St. West, Toronto 1, Ontario (967,647).</p> <p>McIntyre Porcupine Mines Limited, Suite 1200, 55 Yonge Street, Toronto 1, Ontario (238,235¹).</p> <p>Winneway Mines Limited, Suite 1200, 55 Yonge Street, Toronto 1, Ontario (200,000²).</p> <p>Mildrich Corporation Ltd., c/o J. Clare Wilcox & Co., Suite 423, 4 Richmond St. East, Toronto 1, Ontario (127,058).</p> <p>Note:</p> <ol style="list-style-type: none"> 1. Shares beneficially owned including 9 shares registered in the names of the directors of the Company. 2. Shares beneficially owned including 1 share registered in the name of a director of Wexford Mines Limited. Winneway is a wholly-owned subsidiary of McIntyre Porcupine Mines Limited.
22. Names and addresses of persons whose shareholdings are large enough to materially affect control of the Company.	<p>Frobex Limited, Suite 904, 85 Richmond St. West, Toronto 1, Ontario.</p> <p>Area Mines Limited, Suite 1000, 11 Adelaide St. West, Toronto 1, Ontario.</p> <p>McIntyre Porcupine Mines Limited, Suite 1200, 55 Yonge Street, Toronto 1, Ontario.</p>
23. Details of any registration with or approval or authority for sale granted by or any filing with a Securities Commission or corresponding Government body.	The Quebec Securities Commission has approved the issuance of shares to Wexford Mines Limited, the share for share distribution of the Company's shares by Wexford to its shareholders, the distribution of 700,000 of the Company's shares by Frobex Limited to its shareholders and the sale of shares and 5% Income Bonds to McIntyre Porcupine Mines Limited.
24. Has any application for registration with or approval or authority for sale by or any filing with a Securities Commission or corresponding Government body ever been refused, cancelled, suspended or revoked? If so, give particulars.	No.
25. Particulars of any bonds, debentures, notes, mortgages, charges, liens or hypothecations outstanding.	None outstanding, but see Item 16.
26. If assets include investments in the shares or other securities of other companies, give an itemized statement thereof showing cost or book value and present market value.	Not applicable.
27. Enumerate fully each of the following property classifications, giving claim or property numbers, approximate acreage, townships and mining camp or oil field: (a) Properties owned where titles vested in Company.	 (a) None.

27. (b) Properties leased.	(b) The Company is the Lessee of Mining Lease No. 612 granted by the Minister of Natural Resources of the Province of Quebec. This lease covers 199.838 acres in Boisbuisson Township, Electoral District of Gaspé North, Quebec, formerly held by the Company under development licenses, was granted for a term of 20 years from June 21st, 1968, is renewable for 3 further periods of 10 years each, and may be extended thereafter by the Lieutenant-Governor in Council.																																																																																																																																																																						
(c) Properties otherwise held. Give particulars of title held by the Company in each instance, (e.g. patented, unpatented, Crown granted, held under mining license, perpetual lease, etc.)	(c) The Company is the holder of the following mining claims situate in the Townships of Boisbuisson and Lapotardiere, which claims are held under development licenses, and have been designated for renewal purposes as Blocks I-V inclusive: <table><tr><th>BLOCK</th><th>DEVELOPMENT LICENCE NUMBERS</th><th>CLAIM NUMBERS</th><th>APPROXIMATE ACREAGE</th><th>EXPIRY DATE</th></tr><tr><td rowspan="9">I</td><td>222430</td><td>222430-1, 2, 3, 4, 5</td><td>131</td><td>Feb. 3, 1969</td></tr><tr><td>222431</td><td>222431-1, 2, 3, 4, 5</td><td>166</td><td>Feb. 1, 1969</td></tr><tr><td>222432</td><td>222432-1, 2, 3, 4, 5</td><td>198</td><td>Feb. 1, 1969</td></tr><tr><td>222433</td><td>222433-4</td><td>18</td><td>Feb. 4, 1969</td></tr><tr><td>222433A</td><td>222433-1, 2, 3</td><td>91</td><td>Feb. 4, 1969</td></tr><tr><td>222434</td><td>222434-3, 4</td><td>43</td><td>Feb. 2, 1969</td></tr><tr><td>222434A</td><td>222434-1, 2, 5</td><td>76</td><td>Feb. 2, 1969</td></tr><tr><td>222455</td><td>222455-4, 5</td><td>80</td><td>Feb. 13, 1969</td></tr><tr><td>222456</td><td>222456-4, 5</td><td>80</td><td>Feb. 18, 1969</td></tr><tr><td>II</td><td>253237</td><td>253237-1, 2, 3</td><td>128</td><td>Mar. 18, 1969</td></tr><tr><td>III</td><td>212502</td><td>212502-1</td><td>64</td><td>June 22, 1969</td></tr><tr><td rowspan="5">IV</td><td>210599</td><td>210599-3, 4, 5</td><td>79</td><td>Aug. 13, 1969</td></tr><tr><td>212502A</td><td>212502-2, 3, 4, 5</td><td>139</td><td>Aug. 12, 1969</td></tr><tr><td>216912</td><td>216912-3, 4, 5</td><td>102</td><td>Aug. 15, 1969</td></tr><tr><td>216913</td><td>216913-3, 4, 5</td><td>98</td><td>Aug. 14, 1969</td></tr><tr><td>217938</td><td>217938-1, 2, 3, 4, 5</td><td>139</td><td>Aug. 17, 1969</td></tr><tr><td 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1969	222433A	222433-1, 2, 3	91	Feb. 4, 1969	222434	222434-3, 4	43	Feb. 2, 1969	222434A	222434-1, 2, 5	76	Feb. 2, 1969	222455	222455-4, 5	80	Feb. 13, 1969	222456	222456-4, 5	80	Feb. 18, 1969	II	253237	253237-1, 2, 3	128	Mar. 18, 1969	III	212502	212502-1	64	June 22, 1969	IV	210599	210599-3, 4, 5	79	Aug. 13, 1969	212502A	212502-2, 3, 4, 5	139	Aug. 12, 1969	216912	216912-3, 4, 5	102	Aug. 15, 1969	216913	216913-3, 4, 5	98	Aug. 14, 1969	217938	217938-1, 2, 3, 4, 5	139	Aug. 17, 1969	V		205578-5				205579-5			205579	206699-5	224	Nov. 1, 1969		206701-5				206702-4			205947	205573-5	174	Nov. 2, 1969		205947-2, 3, 4, 5			205949	205949-1, 2, 3, 4, 5	161	Nov. 2, 1969	206778	206778-1, 2, 3, 4	149	Nov. 2, 1969	206779	206779-2(pt), 3, 4, 5	133	Nov. 4, 1969	206780	206780-1, 2, 3, 4	133	Nov. 2, 1969	206781	206781-1(pt), 2, 3, 4	162	Nov. 2, 1969	207076	207076-4(pt), 5	66	Nov. 4, 1969		207141-4, 5			207141	208427-5	238	Nov. 30, 1969		208428-5			207143	207143-1(pt), 2, 3, 4, 5	162	Nov. 7, 1969	224193	224193-1	51	Nov. 3, 1969	224193A	224193-2, 3, 4, 5	157	Nov. 3, 1969	224194	224194-2, 3, 4, 5	152	Nov. 12, 1969	224195	224195-1, 2, 3, 4, 5	167	Nov. 2, 1969	230217A	230217-2	40	Nov. 11, 1969	230220	230220-1, 2, 4	120	Nov. 12, 1969
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28. Full particulars of any royalties or other charges payable upon production from each individual property.	No royalties payable, but see Item 18.																																																																																																																																																																						
29. Names and addresses of vendors of any property or other assets intended to be purchased by the Company showing the consideration to be paid.	Not applicable.																																																																																																																																																																						
30. Names and addresses of persons who have received or will receive a greater than 5% interest in the shares or other consideration to be received by the vendor. If the vendor is a limited company, the names and addresses of persons having a greater than 5% interest in the vendor company.	Not applicable.																																																																																																																																																																						

31. Are any lawsuits pending or in process against the Company or any of its properties, or are there any other circumstances which might affect the Company's position or title adversely? If so explain fully.	No.
32. Describe plant and equipment on property or properties.	Permanent plant consisting of floatation concentrator, with capacity of 2,500 tons per day, secondary crusher building, shops, office, water supply and tailings disposal system is now under construction. Temporary equipment now on the property includes a 250 K.W. diesel driven generator, air compressor of 1,200 c.f.m. capacity, shops, office and dry required during development period. Major items of underground equipment already purchased and operating include four load-haul-dump units each of 4 cu. yd. capacity.
33. Describe all development accomplished and planned.	<p>The ore body is being developed from three adits at elevations 2,720, 2,900 and 3,440 feet above sea level. These levels will be connected by inclines at 20% grade and additional operating levels between 2,900 and 3,440 and below 2,720 will be developed from these inclines. The ore pass will feed a crusher to be installed on the 2,720 level, and from here a belt will convey the crushed ore to the secondary crusher station on surface adjacent to the 2,720 adit portal. At present the main entrance adits have been completed, the inclines have been driven about 1,000 feet and work is well advanced on level and stope development and the driving of passes and ventilation raises.</p> <p>Development completed to October 1st, 1968 totals 10,087 feet of lateral work and 2,817 feet of raising.</p>
34. Date and author of mining or petroleum engineer's or geologist's report filed with this application and available for inspection on request.	<p>Date—July 31st, 1968.</p> <p>Author—Dr. B. S. W. Buffam, James, Buffam and Cooper, Geologists, 44 King Street West, Toronto 1, Ontario</p>
35. Full particulars of production to date.	No production to date.
36. Have any dividends been paid? If so, give date, per share rate, and amount paid in dollars on each distribution.	No dividends paid to date.
37. Name and address of the solicitor or attorney whose certificate that the applicant is a valid and subsisting company and that the shares which have been allotted and issued were legally created and are fully paid and non-assessable has been filed with the Exchange.	John McG. Home, Esq., Q.C., O'Brien, Home, Hall, Nolan, Saunders, O'Brien & Smyth, Barristers and Solicitors, 2100 Place du Canada, Montreal 3, Quebec
38. (a) Have any shares of the Company ever been listed on any other stock exchange? If so, give particulars.	No.
(b) Is any application for listing the shares of the Company or any other stock exchange now pending or contemplated? If so, give particulars.	Yes. An application for listing the shares of the Company on the Canadian Stock Exchange is pending.
(c) Has any application for listing of any shares of the Company ever been refused or deferred by any stock exchange? If so, give particulars.	No.

39. Particulars of the principal business in which each officer and director has been engaged during the past five years, giving the length of time, position held and name of employing company or firm.

MR. J. B. ANDERSON is General Manager of McIntyre Porcupine Mines Limited, an office he has held since December, 1967. For more than five years prior thereto he was Vice-President, Mining Operations, Teck Corporation Limited.

MR. MARSH A. COOPER is President of McIntyre Porcupine Mines Limited, an office he has held since August 18, 1967. For more than five years prior to his election to that office, his principal occupation was as a partner in the firm of James, Buffam and Cooper, Consulting Geologists.

MR. J. KENNETH GODIN is Executive Vice-President of McIntyre Porcupine Mines Limited, an office he has held since July 17, 1967. He was General Manager of McIntyre from January 1, 1965 until appointed to his present position, and for more than five years prior thereto was Assistant General Manager of McIntyre.

MR. W. PAUL HAMMOND is Exploration Manager of McIntyre Porcupine Mines Limited, a position he has held since October, 1965. For more than five years prior thereto he was Exploration Manager of The Conwest Exploration Company Limited.

MR. FRANK A. JOHNSTON is Legal Counsel of McIntyre Porcupine Mines Limited, a position he has held since January 1, 1968. From April 1964 until such appointment, he was a member of the firm of Maynard and Johnston, Barristers & Solicitors, and prior thereto a student-at-law.

DR. NORMAN B. KEEVIL JR. is, and has been for more than five years, Vice-President of Teck Corporation Limited.

MR. LOUIS LANDRY is, and has been for more than five years, Secretary-Treasurer of James Richardson Co. Ltd.

MR. F. T. MCKINNEY is, and has been for more than five years, Secretary of McIntyre Porcupine Mines Limited.

MR. JOSEPH J. RANKIN is, and has been for more than five years, President of Frobex Limited, and President of Peruvian Oils & Minerals, Limited.

MR. S. R. VARLEY is, and has been since January 1967, the Comptroller of McIntyre Porcupine Mines Limited. For more than five years prior thereto he was Chief Accountant of McIntyre.

MR. ROBERT J. WRIGHT is, and has been for more than five years, a partner in the firm of Lang, Michener, Cranston, Farquharson & Wright, Barristers and Solicitors.

40. The dates of and parties to and the general nature of every material contract entered into by the Company which is still in effect and is not disclosed in the foregoing.

Except for management contracts, do not include particulars of any contract entered into in the ordinary course of business carried on or intended to be carried on by the Company.

¹ 1. By an agreement dated the 2nd day of February, 1968, between Wexford Mines Limited and the Company, the Company purchased all the assets of Wexford, including its mining properties, for a consideration in effect consisting of the assumption of Wexford's liabilities (except liabilities with respect to share capital) and the allotment and issue to Wexford of Madeleine shares equal in number to the number of outstanding Wexford shares. Wexford subsequently distributed all of such Madeleine shares to its shareholders on a share for share basis.

² 2. By an agreement dated the 2nd day of February, 1968, between the Company, Area Mines Limited, Frobex Limited and McIntyre Porcupine Mines Limited, under which each of Area, Frobex and McIntyre cease to have any rights if it ceases to own 500,000, 500,000 or 200,000 shares respectively of the Company, and which terminates absolutely on December 31st, 1997, the parties other than the Company agreed to vote all shares of the Company to control the operations of the Company and to cause it to do or refrain from doing certain specified acts.

³ 3. By an agreement formed by the acceptance by the Company on May 28th, 1968, of an offer in writing by McIntyre Porcupine Mines Limited dated April 25th, 1968, McIntyre agreed to provide financing of \$12,500,000 to enable the Company to bring into production its mining property at Ste. Anne des Monts, Quebec. The financing will be effected by McIntyre purchasing from the Company 12,500 units each consisting of one \$1,000 5% Income Bond and 80 common shares at a purchase price of \$1,000 per unit. Under the provisions of this agreement, 1,000,000 common shares will be issued to McIntyre. Should additional funds be required to bring the mining property into production, McIntyre agreed to purchase up to a further \$2,500,000 in principal amount of such Income Bonds at par.

41. Any other material facts not disclosed in the foregoing.

There are no other material facts not disclosed in the foregoing.

42.

STATEMENT SHOWING DISTRIBUTION OF ISSUED CAPITAL

as of November 8th, 1968

FREE STOCK	Shares	Shares
(a) Distributed and in the hands of the public (exclusive of the promoters, officers and directors of the Company and their agents or trustees).	746,231	
(b) Distributed and in the hands of the promoters, officers and directors of the Company and their agents or trustees.	2,959,655	
Total free stock		3,705,886
ESCROWED OR POOLED STOCK		
(c) Held in escrow or pool as set out in Item 19 of this application.		NIL
Total issued capital		3,705,886

RECORD OF SHAREHOLDERS	
Number of registered shareholders holding shares in class (a) above	4,579
Number of registered shareholders holding shares in class (b) above	12
Number of registered shareholders holding shares in class (c) above	NIL

43.

STATEMENT SHOWING NUMBER OF SHAREHOLDERS

as of November 8th, 1968

Number	Shares
4,224 Holders of 1 — 99 shares	40,655
271 “ “ 100 — 499 “	51,697
38 “ “ 500 — 999 “	25,715
25 “ “ 1000 — 1999 “	35,806
5 “ “ 2000 — 2999 “	12,840
5 “ “ 3000 — 3999 “	15,957
3 “ “ 4000 — 4999 “	12,807
20 “ “ 5000 — up “	3,507,951
Fractions “	2,458
4,591 Stockholders	Total Shares 3,705,886

Dated at Toronto, Ontario, the 31st day of October, 1968.



LES MINES MADELEINE LTEE - MADELEINE MINES LTD.

“M. A. COOPER” President

“F. T. McKINNEY” Secretary

FINANCIAL STATEMENTS

MADELEINE MINES LTD.
(Incorporated February 2, 1968 under the laws of Quebec)

BALANCE SHEET SEPTEMBER 30, 1968

ASSETS

CURRENT ASSETS:

Cash	\$ 150,250	
Accounts receivable	7,929	
Prepaid expenses	4,933	\$ 163,112
		<hr/>

FIXED ASSETS:

Land, buildings and equipment, at cost	2,392,732	
Mining properties held under leases and mining development licenses, in the Gaspé area (note 4)	32,025	2,424,757
		<hr/>

OTHER ASSETS AND DEFERRED EXPENDITURES:

Exploration, development and administrative expenditures deferred	2,768,225	
Deposits on purchase of equipment and on power line	211,117	
Supplies, at cost	81,566	3,060,908
		<hr/>
		<u>\$ 5,648,777</u>

LIABILITIES

CURRENT LIABILITIES:

Accounts payable and accrued liabilities	\$ 640,645
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PAYABLE TO McINTYRE PORCUPINE MINES LIMITED (note 2)	3,510,542
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CONTINGENT LIABILITY:

Additional consideration for mining claims (note 4)	
	<hr/>
	4,151,187

SHAREHOLDERS' EQUITY:

Capital stock (notes 1, 2 and 5)	
Authorized—5,000,000 shares without par value	
Issued —3,705,886 shares	1,497,590
	<hr/>
	<u>\$ 5,648,777</u>

Approved by the Board:

"M. A. COOPER", Director

"J. K. GODIN", Director

MADELEINE MINES LTD.
STATEMENT OF EXPLORATION, DEVELOPMENT AND ADMINISTRATIVE
EXPENDITURES DEFERRED
FROM INCORPORATION ON FEBRUARY 2, 1968 TO SEPTEMBER 30, 1968

Adit preparation	\$ 173,129
Level development	711,188
Raising	185,005
General expenses at the property	328,525
Administrative and general expenses	92,275
Expenditures for the period	1,490,122
Expenditures by predecessor company prior to February 2, 1968 (note 1)	1,278,103
Total deferred at end of period	<u>\$ 2,768,225</u>

STATEMENT OF SOURCE AND APPLICATION OF FUNDS
FROM INCORPORATION ON FEBRUARY 2, 1968 TO SEPTEMBER 30, 1968

Source of funds		
Advances from McIntyre Porcupine Mines Limited (note 2)		\$ 3,510,542
Application of funds		
Buildings and equipment	\$ 2,082,189	
Deposits on purchase of equipment and on power line	189,617	
Exploration, development and administrative expenditures	1,490,122	
Purchase of supplies	64,247	
Mining claims	3,125	3,829,300
Decrease in working capital position		318,758
Working capital deficiency of predecessor company assumed at February 2, 1968 (note 1)		158,775
Working capital deficiency at end of period		<u>\$ 477,533</u>

AUDITORS' REPORT

To the Directors of
Madeleine Mines Ltd.

We have examined the balance sheet of Madeleine Mines Ltd., as at September 30, 1968 and the statement of exploration, development and administrative expenditures deferred and source and application of funds from incorporation on February 2, 1968 to September 30, 1968 and have obtained all the information and explanations we have required. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion, and according to the best of our information and the explanations given to us and as shown by the books of the company, these financial statements are properly drawn up so as to exhibit a true and correct view of the state of the affairs of the company as at September 30, 1968 and the results of its operations and the source and application of its funds for the period then ended, in accordance with generally accepted accounting principles.

THORNE, GUNN, HELLIWELL & CHRISTENSON
Chartered Accountants

Toronto, Canada
November 27, 1968

MADELEINE MINES LTD.

NOTES TO FINANCIAL STATEMENTS
SEPTEMBER 30, 1968

1. ISSUE OF CAPITAL STOCK TO PREDECESSOR COMPANY

As of February 2, 1968 the company purchased all of the assets of the predecessor company, Wexford Mines Limited, in consideration of the assumption of all of Wexford's liabilities and the issue of 3,705,886 shares of the company's capital stock.

2. FINANCING ARRANGEMENTS

Under an agreement dated April 25, 1968 McIntyre Porcupine Mines Limited has undertaken to provide not less than \$12,500,000 and up to \$15,000,000 to bring the company's mining properties into production. These funds are to be provided by the purchase of 12,500 \$1,000 units consisting of one 5% first mortgage income bond of \$1,000 and 80 shares of the company and to the extent necessary to bring the property into production, by the additional purchase of up to \$2,500,000 5% first mortgage income bonds.

The trust deed authorizing the issue of the \$15,000,000 5% first mortgage income bonds provides that the bonds are to be redeemed out of the cash flow of the company and mature on December 31, 1982. One million shares are reserved for allotment under the financing agreement.

3. COSTS TO COMPLETE THE DEVELOPMENT PROGRAM

Costs to be incurred after September 30, 1968 to bring the company's mining property into production are estimated to amount to approximately \$9,900,000. Funds to be made available under the financing arrangements (note 2) are more than adequate to meet these costs and required working capital.

4. MINING CLAIMS

Ninety-nine mining claims transferred to the company were contributed to the predecessor company by shareholders in 1966 and were recorded in the predecessor company's accounts at the value of \$27,000 determined by directors. If the ninety-nine mining claims are brought into production, the company is obligated to pay to the original vendors of the claims out of future net profits a total of \$500,000. Payments are to be made of amounts equal to 10% of the company's cash flow in the preceding year, commencing in the year following the year during which the retirement of the first mortgage income bonds (note 2) is completed.

In 1967 eleven mining claims were purchased for \$1,900 cash by the predecessor company and in 1968 an additional four claims were purchased for \$3,125 cash.

5. DIVIDEND RESTRICTION

Under the trust deed of the 5% first mortgage income bonds (note 2) the company has undertaken that it will not pay any dividends until the bonds are retired.

6. REMUNERATION OF DIRECTORS AND SENIOR OFFICERS

During the period from incorporation on February 2, 1968 to September 30, 1968 remuneration was paid as follows:

Directors	\$ 2,250
Officers	Nil
Five highest paid employees	37,300
	<hr/>
	\$ 39,550
	<hr/>

ENGINEER'S REPORT

MADELEINE MINES LTD.
CANTON DE BOISBUISSON
GASPE PARK, QUEBEC

REPORT ON DEVELOPMENT OF MAIN ORE BODY JULY, 1968

SUMMARY

This report contains a review of the property of the Madeleine Mines Limited and an estimate of the cost of development of the Main Ore Zone.

The property is located about 27 miles southeast of the town Ste. Anne des Monts in Gaspé Park, Quebec. Access will be by hard surfaced road from this town, a distance of approximately 27 miles.

Development work completed to July 1, 1968 consists of 76,528 feet of surface and underground Diamond Drilling, 8,810 feet of underground Lateral Development, and 1,952 feet of raising.

The local geology consists of sedimentary and volcanic formations of Ordovician Age. The Main Ore Body is located in quartz biotite hornfels, and its economic mineralization consists of chalcopyrite and bornite occurring as thin fracture fillings.

Reasonably well assured ore reserves are estimated to amount to 5,295,000 tons grading 1.36% Copper and 0.33 ounces of silver per ton after 15% dilution grading 0.30 Cu.

It is proposed to develop the mine to produce 3500 tons per day for 5 days a week. Milling rate for 7 days per week will be 2500 tons.

Mining of the ore will be by a series of open transverse stopes, separated by pillars which will subsequently be removed. Ore will be crushed underground by jaw crusher located immediately above the 2720 foot level.

Mine operating costs are estimated at \$1.37 per ton ore milled.

Metallurgical test work has indicated that a recovery of 92% of the copper can be made into concentrates of an average grade of 32% Cu. and 8 ounces of silver.

The expected results in the treatment plant have been based on a large number of metallurgical tests and they should be readily attained.

The treatment plant will principally consist of the milling equipment — formerly used by First Maritime Mining Corporation at Tilt Cove, Newfoundland. This equipment has been purchased and is now being transported to the Madeleine plant site.

The mill site will be in a valley adjacent to the entrance of the 2900 adit.

Treatment costs in the mill are estimated at \$0.95 per ton of ore milled.

A ten year contract for Power has been signed with Hydro-Quebec.

Operating personnel is expected to consist of 36 staff and 104 hourly-rated employees. It is probable that with the exception of senior staff there is a suitable supply of labour available in the surrounding area.

The marketing of the concentrates is still under consideration and the final decision whether it will be sold to a domestic or foreign smelter has not been made.

It is recommended that the proposed Development Programme be completed and the mill placed in production at a daily rated capacity of 2,500 tons.

MADELEINE MINES LTD.
CANTON DE BOISBUISSON
GASPE PARK, QUEBEC

REPORT
ON
DEVELOPMENT OF MAIN ORE BODY
JULY, 1968

INTRODUCTION

This report contains a review of the Madeleine Mines Limited property in Gaspé Park, Québec, and an estimate of the ore reserves, operating costs and capital costs required to put the mine into production.

The report has been prepared at the request of McIntyre Porcupine Mines Limited who have undertaken the major financial and development responsibilities.

The property was visited on two occasions in April and May, 1968, by the writer of this report when the proposed development programme was reviewed. The ore occurrences were examined underground and diamond drill cores inspected on surface.

Discussions at the property were held with Mr. G. Lacaille, Manager and Mr. Paul Girard, Geologist. Further discussions were held in Toronto with Mr. J. B. Anderson, Vice-President and General Manager, and with Mr. P. O. Parfitt, Chief Mine Engineer of McIntyre.

The ore reserves were recalculated as a check against those calculated by the company. Our estimate agreed closely with the company estimate.

The report is based in general on the information derived from the Feasibility Report, prepared by the Engineering and Metallurgical staff of McIntyre Porcupine Mines Limited, supplemented by a personal examination of the very detailed records of the work accomplished at the property by Wexford Mines Limited and Madeleine Mines Limited.

The assumptions and statements made in this report are all believed by us to be valid and to be the best approximations to be made in present circumstances.

CORPORATE STRUCTURE

The corporate structure and ownership of the company are as follows:

President - - - - - Mr. M. A. Cooper
Vice-President and General Manager - Mr. J. B. Anderson

Incorporated in Québec, February 2, 1968, to take over the assets of Wexford Mines Limited, an Ontario Company, with similar capitalization.

Capitalization: Authorized 5,000,000 shares of no par value
Issued 3,705,886 shares February 13, 1968
Remaining 1,294,114 shares
Designated 1,000,000 shares for development financing by McIntyre

Present Ownership (December 31, 1967)

Frobex Limited	1,667,647 shares	45.0%
Area Mines Limited	1,551,176 shares	41.9%
McIntyre Porcupine Mines Limited	238,235 shares	6.4%
Vendor Interests and Others	248,828 shares	6.7%
Total	3,705,886 shares	100.00%

Directors of the New Company

Messrs. Anderson, Cooper, Godin, Hammond, Johnston, Keevil, Landry, Rankin and Wright.
Total nine Directors.

LOCATION AND ACCESS

The property comprises some 4,400 acres in a roughly rectangular claim block. It is located about 14 miles south of the St. Lawrence River in Lapotardière and Boisbuisson Townships in the Gaspé Peninsula of Québec.

The orebody outcrops at an elevation of 3,700 feet above sea level on the summit of Petit Mont Ste. Anne in the northwest part of the Tabletop Mountains.

This area is deeply cut by steep-sided valleys with summits rising some 2,000 feet above the valley floors. The valleys and lower slopes generally are extensively covered by overburden and support a heavy vegetation. Vegetation thins rapidly upward to a scant alpine flora on the mountain tops.

The area is unglaciated and rock debris is generally in place.

A hard surface road leading south from the town of Ste. Anne des Monts is used to reach the property. This road is followed some 20 miles to where a narrow gravel road leads north-easterly about 7 miles to the property.

Transportation from Toronto to Ste. Anne des Monts, is available by air, Air Canada to Montreal, then Quebec Air, Montreal to Rimouski, then by car approximately 120 miles, or by train to Mont Joli then by car for approximately 100 miles. There is a 4,000 foot gravel strip at Ste. Anne des Monts which will accommodate DC-3 type aircraft.

HISTORY

The property was staked in 1964 by Mr. Yvon Pelletier after Gaspé Park was opened to prospecting. He discovered copper staining in the rocks on top of Petit Mont Ste. Anne. The property was optioned to Noranda Mines Limited who carried out an exploratory programme including diamond drilling, and then dropped the option.

Area Mines Limited and Frobex Limited, the latter financed by McIntyre Porcupine Mines Limited, Conwest Exploration Company Limited and The British Metal Corporation (Canada) Limited, optioned the property in late 1965 and subsequently placed it in a new company, Wexford Mines Limited.

Wexford Mines Limited carried out an extensive programme of geological mapping, geophysical surveys, and surface diamond drilling, which outlined a commercial tonnage of moderate grade copper ore. Subsequently adit development and underground diamond drilling has been carried out preparatory to bringing the mine into production.

In February 1968, Madeleine Mines Limited (Les Mines Madeleine Ltée) was incorporated in Quebec to take over the assets of Wexford Mines Limited. McIntyre, the largest shareholder of Frobex, has undertaken the major financial and development responsibilities.

DEVELOPMENT WORK

The Development Work completed to June 30, 1968 at the property, is as follows:

A. Diamond Drilling		
Surface		Footage
Noranda		4,769
Wexford		49,154
Madeleine		221
Total Surface		54,144 feet
Underground		
Madeleine		22,384
Total Diamond Drilling		76,528 feet
B. Underground Development		
Lateral Development	Level	Footage
	2720	1,325
	2900	4,118
	3400	2,896
Sub Level	3400	277
Access Ramps	34-32	194
Total		8,810 feet
Raising		
Ore and Waste Passes		1,032
Access Raise		475
Slot Raise		382
Diamond Drill Raises		62
Total Raising		1,952 feet
Slashing — Level and Raise		97,940 cu. ft.

ECONOMIC GEOLOGY

Sedimentary and volcanic formations of Ordovician Age constitute the underlying rocks at the Madeleine Mine. The sediments and older volcanics are conformable and together have a total thickness of 1,500 feet. These formations are truncated near the eastern boundary of the property by a large stock of granite of probable Devonian Age.

The sedimentary rocks in which the ore body occurs consist mainly of argillaceous siltstone and greywacke, intercalated with limestone, all now highly altered to schists, hornfels, metagreywacke and skarn.

The Main Ore Body is located in quartz biotite hornfels which are characterized by a massive non-bedded phase and a distinctly banded phase. Ore occurs in both types, in the massive phase in the upper portion of the mine, and in the banded phase at depth.

The shape of the ore body is bluntly wedge shaped in vertical cross section, wide in the massive hornfels, tapering in the lower banded rocks and wedging out at the granite contact. The ore body strikes north-south about parallel to the granite contact, dips east at 60° to vertical, and plunges steeply at 55° to the south. It has a maximum width of 200 feet and length of 500 feet at the 3260 horizon. The boundaries of the ore mineralization are relatively sharply defined although very low grade copper is present in the walls. There is an abrupt decrease in values and the problem of dilution during mining should not be serious.

The economic mineralization consists principally of chalcopyrite and bornite, the bornite tending to occur along the lower section of the ore body. Here the average grade is higher than in the chalcopyrite section. It is doubtful, however, if these two zones of mineralization can be mined separately.

Microscopic examination of the ore samples shows that minor amounts of the following minerals are present in addition to the chalcopyrite and bornite.

Arsenopyrite	Galena	Native Copper	Pyrrhotite
Chalcocite	Hematite	Native Silver	Sphalerite
Covellite	Magnetite	Pyrite	

The chalcopyrite and bornite mineralization occurs as thin fracture fillings with minor dissemination through the host rocks. Ore contacts with the enclosing waste rock should be readily distinguished during mining.

ORE RESERVES

The accompanying sections show the basis of the calculations. The zone on the footwall side, where bornite predominates, was where possible, calculated separately, although the boundary between it and the chalcopyrite zone is, in many places, gradational. Volume factor used was 11.3 cu. ft. per ton. The grade of 0.3% copper used for the assumed 15% dilution is approximately the average grade of the material adjacent to the blocks outlined.

Reserve without dilution	- - - - -	4,604,000 tons at 1.52% Cu.
With dilution at 15% at 0.3% copper	-	5,295,000 tons at 1.36% Cu.
Estimated silver content	=	0.33 ounces per ton.

The following estimate of the reserves in the Main and North Ore Zones included at January 1, 1968 the ore outlined only by detailed surface diamond drilling. Since the beginning of the year considerable lateral underground development work has been accomplished in the Main Ore Zone and this work has confirmed ore previously estimated in these areas. It is the opinion of the writer that all the ore shown in the estimate can be considered reasonably well assured.

SUMMARY OF ORE RESERVES BY SECTIONS
(Undiluted)

Section	Bornite Zone		Chalcopyrite Zone		Total	
	Tons	Grade % Cu.	Tons	Grade % Cu.	Tons	Grade % Cu.
4300	—	—	82,000	1.50	82,000	1.50
4400	—	—	49,000	1.30	49,000	1.30
4600	—	—	22,000	1.00	22,000	1.00
4650	20,000	1.74	24,000	0.97	44,000	1.32
4700	53,000	2.01	155,000	0.94	208,000	1.21
4750	39,000	2.49	112,000	1.15	151,000	1.50
4800	187,000	2.42	248,000	0.90	435,000	1.55
4850	120,000	2.20	182,000	1.02	302,000	1.49
4900	188,000	2.07	320,000	1.04	508,000	1.42
5000	183,000	2.31	634,000	1.29	817,000	1.51
5100	289,000	2.14	422,000	1.40	711,000	1.70
5200	263,000	2.46	199,000	1.16	462,000	1.90
5300	—	—	495,000	1.51	495,000	1.51
5350	—	—	35,000	0.86	35,000	0.86
5400	—	—	284,000	1.11	284,000	1.11
	<u>1,342,000</u>	<u>2.25</u>	<u>3,263,000</u>	<u>1.22</u>	<u>4,605,000</u>	<u>1.52</u>

SUMMARY OF ORE RESERVES BY LEVELS

Levels	Undiluted Total		Dilution*		Total Reserves (diluted)	
	Tons	% Cu.	Tons	% Cu.	Tons	% Cu.
Surface						
to 3440	808,000	1.25	121,000	0.30	929,000	1.12
3400 - 3260	1,120,000	1.47	168,000	0.30	1,288,000	1.32
3260 - 3080	905,000	1.70	136,000	0.30	1,041,000	1.52
3080 - 2900	768,000	1.75	115,000	0.30	883,000	1.56
2900 - 3720	546,000	1.58	82,000	0.30	628,000	1.41
2720 - 2540	252,000	1.40	38,000	0.30	290,000	1.25
2540 - 2360	205,000	1.26	31,000	0.30	236,000	1.14
	<u>4,604,000</u>	<u>1.52</u>	<u>691,000</u>	<u>0.30</u>	<u>5,295,000</u>	<u>1.36</u>

* Dilution = 15% at 0.3% copper.

The estimate of the ore reserves was calculated using the information given on 15 vertical cross sections (scale 1" to 50 feet), spaced at intervals across the strike of the ore body. These cross sections include 43+00 to 54+00 and cover a strike length of 1,200 feet after allowing 50 feet beyond their outer limits.

The information from which the estimate was made consists entirely of the results obtained from surface and underground diamond drilling. Sampling of the cores was done generally in 5 foot lengths, though locally because of the uniformity of the sulphide mineralization, ten foot samples were taken.

The relationship between feet of ore intersection and tons is considered sufficient to give a close approximation of reserves in an ore body of the relatively uniform character as that of Madeleine Mines.

In addition to the Main Ore Zone, drilling on sections 43+00 and 44+00 discovered a second and parallel ore zone (the North Zone). Four drill holes indicated a thickness of 50 feet for a length of 200 feet and a vertical height of 150 feet. Average grade is about 1.25% Cu.

Widely scattered drilling has indicated the presence of two additional ore zones lying parallel to the Main Ore Zone. Possible ore in these two ore zones has not been included with the estimated ore reserves.

PROPOSED MINE DEVELOPMENT

It is planned to develop the property for production to start in the second quarter of 1969, at a milling rate of 2,500 tons per day. Normal operation of the mine will be on a five days a week basis, requiring the production of 3,500 tons per mining day.

The plant will be situated at an elevation of 2,600 feet above sea level in the valley below the summit of Petit Mont Ste. Anne. The main entrance to the mine will be by an adit which will intersect the orebody approximately 1,000 feet below the outcrop.

The main orebody is a plunging pipe-like body of mineralization, striking roughly north and south with a maximum length of about 500 feet and widths up to 200 feet. The dip is to the east at about 60° in the upper section, but steepens at depth. The pitch is southward at an average of 55°. The orebody outcrops on the top of Petit Mont Ste. Anne at an elevation of 3700 feet above sea level, and has been traced downwards to a depth of 1400 feet below the outcrop. It has been partially explored by crosscutting on the 2900 foot adit level and by diamond drilling from this level and from surface. Where exposed, the ground required little support and the walls are expected to be strong. The topography is such that an adit can be driven from a point adjacent to the mill site, thus eliminating hoisting for the bulk of the ore in the top 1,000 feet of the orebody.

Mining Method

The proposed mining system was chosen to make maximum use of mechanization now available and to provide adequate ground control.

Significant improvements in productivity have been found possible with the reliable "load-haul-dump" equipment now available, and it was therefore decided to develop a mining method and mine layout which would permit the use of these machines for draw-point mucking and for development. At the same time, the larger openings which will result will make it possible to improve drilling efficiency by the use of multiple drill jumbos.

It was decided to mine the orebody from the top down by a series of open transverse stopes separated by pillars which would be systematically removed as soon as possible. This should give complete extraction with good ground control and without excessive dilution.

With the proposed system the level interval will be 180 feet. The transverse stopes will be 150 feet in height, thus leaving a temporary crown pillar 30 feet in depth. Stopes will be 60 feet wide, separated by 40 foot pillars. Level development will require crosscutting the orebody at 50 foot intervals. Alternate crosscuts will constitute sill drifts from which the bottom halves of the stopes will be drilled off by means of up holes drilled by machines mounted on two-drill jumbos. Draw-points will be driven into the stopes from the intermediate pillar crosscuts which will be extended to connect with the return airway in the hanging wall. Two drilling sub-levels will be required: one at 75 feet above the level, mainly for pillar extraction, and the other at around 150 feet, to drill off the tops of the stopes with down holes and for extracting the crown pillars.

With this layout, the bottom halves of the stopes can be blasted and mucked out at any time, which will provide some flexibility. The top halves will not normally be broken until work in the scam drifts immediately above has been completed. As soon as two adjacent stopes have emptied, the pillar between them and the crown pillar above will be blasted. Pillars will thus be extracted in sequence from south to north with the caved wall-rock following on top of the ore. The pillars above the drawpoints will be drilled off from them and may be broken up as soon as the drawpoints have been abandoned or blasted with the pillars below.

Level Development

The existing 2900' level will be developed as a mining level and levels will also be established immediately at 2720 feet, 3080 feet, 3260 feet and 3440 feet above sea level. Adits will be driven on the 3440 foot and 2720 foot levels and the remaining levels will be developed internally. Mucking from the drawpoints will be done with 4 cu. yd. Wagner ST 4A Scooptrams which will deliver the ore to an ore-pass situated in the foot-wall of the orebody. At the bottom of this pass, a jaw crusher will be installed immediately above the 2720 foot level and this will feed to a belt conveying the ore to the crusher house at the adit mouth. All levels will be connected by inclines driven on a 20% grade. These will facilitate rapid movement of equipment and provide access to the drilling sub-levels. They also will eliminate the need for a shaft above the 2720 level. When the mine is extended below this horizon access ramps will be driven and further levels established. An ore hoisting shaft may then be required.

Surface Pillar

From the top mining level at 3440 feet the height to the surface outcrop is about 260 feet and the ore in this block will be mined first. Present plans are to develop it by sub-levels driven from an access raise and to drill it off almost entirely from underground. Mining will then be independent of weather conditions which might disrupt the sequence.

MINE OPERATING COSTS

With the degree of mechanization planned it is expected that the production of 3,500 tons per day for 5 days per week can be attained with an underground crew consisting of six supervisors and 50 hourly-rated employees.

Excluding the capital cost of primary adit openings, ore and waste passes and ventilation raises, which amounts to about 17¢ per ton on the present ore reserves, development and underground operating costs are estimated at \$1.37 per ton of ore mined.

METALLURGY

The principal ore minerals found in Madeleine Mines are chalcopyrite and bornite with minor amounts of chalcocite-covellite, and a small amount of silver. The gangue minerals include quartz, talc, chloride, biotite, pyroxene and carbonate. The sulphide minerals are present between grain boundaries of the silicate minerals and as inclusions within them.

Metallurgical test work has indicated that mill feed grading 1.36% copper and 0.33 ozs. silver can be concentrated to 32% Cu. and 8 ozs. Ag with recoveries of 92% and 85% respectively. In order to attain these recoveries it is necessary to grind the ore to 60% minus 325 mesh (44 microns). The ore has been found harder to grind in the coarse sizes than in the fine.

Eighty per cent of the copper is floated within five minutes to produce a primary concentrate which is readily upgraded. Even with extended flotation and cleaning time, the remainder produces concentrate lower in grade than the former. The contaminant is silica. It derives from micron size sulphide particles attached to, or encased in, silica grains. This type of mineral occurrence precludes finalizing grade-recovery figures until marketing costs are known and operating costs have been established in the plant.

The projected milling rate has been set at 2500 tons per day and the concentrate production will amount to 35,000 tons per year. The mill formerly operated by First Maritime Mining Corporation at Tilt Cove, Newfoundland, has been purchased for the sum of \$575,000. The equipment in this plant is being dismantled, overhauled, transported to site and re-erected. Total overall cost of the mill installation has been estimated at \$3,000,000.

The work force in the mill will consist of 5 staff members and 27 hourly-rated personnel.

Test Work

Metallurgical investigation of the Madeleine ore has been accomplished by means of bench tests, a large scale pilot plant test, and other allied investigations. Reports have been submitted covering the work done and results obtained which generally confirm the recovery and grade of concentrate stated on the previous page.

MILLING

The treatment plant of First Maritime Mining Corporation at Tilt Cove, Newfoundland, was purchased following the cessation of operations on June 30, 1967. The plant had a nominal capacity of 2,000 tons per day and occasionally had treated up to 2,300 tons.

The Madeleine Treatment Plant will consist of Crushing, Grinding, Flotation, Regrinding, Thickening, and Filtering. There is the possibility that marketing requirements will necessitate drying the concentrates prior to shipment and provision will be made for this eventuality.

The McIntyre staff estimate that the per ton cost of milling will total \$0.95.

POWER

A ten year contract has been signed with Hydro-Quebec to supply up to 6000 Kilowatts for use at the Madeleine property. This will be supplied through a new 7 mile, 69,000 Volt line to be constructed by Hydro. As a contribution towards the cost of establishing this power service, Madeleine Mines has agreed to pay a total of \$175,000 prior to the start of line construction.

Madeleine Mines contribution, which will not bear interest, will be refunded by Hydro-Quebec at the end of each calendar year in installments equal to 10% of the bills for power paid by the customer that year, until fully reimbursed.

ROAD

Arrangements have been made with the Department of Highways for the construction of a new access road to connect the property with the present paved highway to Ste. Anne des Monts. Estimated cost of this would be a maximum of \$100,000 per mile which would be shared on a 50/50 basis between the Government and the company. Work is expected to get underway in the early Spring with the company portion of the cost estimated at \$350,000. As this will not be completed until late Summer, repairs will be made to the present mine road to avoid interruption to the construction programme.

WATER SUPPLY

An adequate supply of water is available in the north-east branch of the Ste. Anne river about 3 miles from the plant site and 1500 feet below it. A water line and pumping system will be installed to deliver 2,000 U.S. gallons per minute from this point to the plant. Estimated cost of the installation is \$400,000, and power requirements for pumping will be about 700 HP.

LABOUR

Proposed operating personnel at the property will consist of 36 staff and 104 hourly rated for a total of 140. With the exception of senior staff and a number of skilled tradesmen, there would appear to be a suitable supply of labour available in the surrounding area. Present plans are to purchase cookery and bunkhouse facilities capable of accommodating 60 men. Additional capacity will be required during the construction

period and further units will be rented as required. All married personnel will be housed in the Ste. Anne des Monts area where available housing will be utilized and further units constructed if required. Several local people have expressed interest in building apartment houses for rent and the company will encourage this by offering a guaranteed rental for a period of 3 to 5 years. In addition, some trailers may be established at the mine site for key mechanical and electrical personnel.

Ste. Anne des Monts has a 120-bed hospital staffed and equipped to take care of the town and the surrounding area. Plans are also underway for the construction of a larger hospital during the coming year. At the mine site a first aid station will be established for the company employees, with arrangements made for the services of local doctors if required.

MARKETING

At a milling rate of 2,500 tons per day the mine will produce up to 100 dry tons of concentrate per day or 35,000 tons per year. The marketing of this concentrate is still under consideration and the final decision as to whether it will be sold to a domestic or foreign buyer has yet to be made.

CAPITAL EXPENDITURES

Kilborn Engineering Limited was employed to carry out an engineering study and to prepare capital cost estimates. Their report was submitted to McIntyre Porcupine Mines Limited on November 15, 1967. A summary of the estimated capital costs is as follows:

ESTIMATES OF CAPITAL REQUIREMENTS

from Kilborn Engineering Limited - November 15, 1967

UNDERGROUND

1967 Operating Expenses (early estimate).....	\$ 682,000	
1968 Operating Expenses Budget.....	800,000	
Other Preproduction—underground	1,778,000	
Equipment	1,507,000	
Sub Total.....		\$ 4,767,000

SURFACE - PROCESSING

Conveying	\$ 346,000	
Tilt Cove Purchase, Dismantle and Shipping.....	1,419,000	
Re-erect Tilt Cove Buildings.....	1,265,000	
Repair and Install Tilt Cove Equipment.....	880,000	
Sub Total.....		\$ 3,910,000

SURFACE - ANCILLARY COMPLEX

Building	\$ 461,000	
Equipment	808,500	
Power Distribution	338,000	
Fresh Water Supply	408,100	
Tailings Disposal	519,000	
Sub Total.....		\$ 2,534,600

MISCELLANEOUS

Housing	\$ 462,000	
Roads - Yards - Fencing	412,000	
Sub Total.....		\$ 874,000

Engineering - Purchasing - Demolition and Re-Construction Management.....	\$ 750,000	
Construction Camps - Equipment Rental - Contractors Fees - Construction Overhead - Tilt Cove and Mine Site.....	\$ 925,000	

OTHER CAPITAL REQUIRED

Stores Inventory	\$ 400,000	
Working Capital (approximately 4 months at cost).....	1,000,000	
Sub Total.....		\$ 1,400,000

TOTAL CAPITAL REQUIREMENTS, exclusive of interest.....		\$15,160,000
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Less: 1967 Operating Expenses (above estimate).....	\$ 682,000	
Estimated cash on hand available for development.....	336,000	1,018,000

ADDITIONAL FINANCING REQUIRED		\$14,142,000
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NOTES:

1. Kilborn's estimates contain 10% for contingencies.
2. Financing is planned by way of income debentures. Interest at 5.00% will accumulate until it can be paid out of cash flow from operations. Accrued interest to the beginning of production would amount to about \$432,000.
3. Working capital for about 4 months must be provided in the first year. Accounts Receivable at net smelter values will amount to \$2,090,000 of which about \$1,000,000 in actual costs will be provided from debt money.
4. Cash on hand available for development basis of estimate.

Cash on Hand — Wexford Balance Sheet	
September 30, 1967	\$ 677,931
Less: October Expenses	\$ 78,881
November Expenses	166,466
December — Estimate	96,267
	<u>341,614</u>
Remaining Cash Available for Major Development	<u>\$ 336,317</u>

The reported book value cash on hand at 1967 year end was much less because of large development expenditures begun in December including \$200,000 for the Tilt Cove Mill. These are segregated to conform with Kilborn's presentation of estimates.

CONCLUSIONS AND RECOMMENDATIONS

The study and evaluation of the economic possibilities of the Main Ore Body of Madeleine Mines indicates that the profit potential of the enterprise is good at prices of copper that can reasonably be expected during the next ten years.

It is recommended that the development of the property be continued because it is well warranted on the basis of the tons and grade of ore now in sight.

July 31, 1968

CERTIFICATE

I, BASIL SCOTT WHYTE BUFFAM, of the City of Toronto, in the Province of Ontario, do hereby certify as follows:

- (1) I am a Consulting Geologist and reside in the City of Toronto in the Province of Ontario.
- (2) I am a graduate of:
McGill University, B.Sc. Degree, 1923
McGill University, M.Sc., Degree, 1924
Princeton University, Ph.D. Degree, 1927
- (3) I am a registered Engineer of the Association of Professional Engineers of Ontario. I am a member of the Society of Economic Geologists, the Canadian Institute of Mining and Metallurgy, and the American Institute of Mining and Metallurgical Engineers.
- (4) I have been practising my profession as a Consulting Geologist since graduation.
- (5) I am a partner in the firm of James, Buffam & Cooper, Consulting Geologists, Suite 1506 - 44 King Street West, Toronto 1, Ontario.
- (6) I have visited the property of Madeleine Mines Limited in Gaspé Park, Quebec, in April and May, 1968. There I examined the ore occurrence both underground and from diamond drill cores. I have also studied, both at the Mine and at Head Office, the detailed records of the development work.
- (7) I have no interest, direct or indirect, in the securities of either Madeleine Mines Limited or McIntyre Porcupine Mines Limited, nor do I expect to receive any interest.

Toronto, Ontario
July 31, 1968

B. S. W. BUFFAM

